Amendment and Response dated June 11, 2007

## **LISTING OF THE CLAIMS**

1. (Currently Amended) A method of adding interactive functionality to a web-page comprising:

receiving a request for the web-page from a first user; retrieving the requested web-page;

embedding script code within the requested web-page to add interactive functionality to the web-page; and

<u>providing</u> transmitting the requested web-page having the embedded script code to the first user;

wherein said embedding step, which is performed absent user editing prior to providing the web-page in response to the web-page request, comprises parsing the requested web-page to determine an appropriate location to embed script code that is absent from the requested web page prior to said parsing.

- 2. (Currently Amended) A method as recited by claim 1, further comprising: receiving a request for the requested web-page from a second user; and providing transmitting the requested web-page having embedded script code to the second user, the script code enabling the first user and the second user to interact with each other while viewing the requested web-page.
- 3. (Cancelled).
- 4. (Previously Presented) A method as recited by claim 1, wherein the web-page includes a header and wherein the appropriate location is in the header.
  - 5. (Cancelled)
  - 6. (Cancelled)

Amendment and Response dated June 11, 2007

7. (Previously Presented) A method as recited by claim 1, wherein said receiving step comprises:

receiving first user account data from the first user; and determining, based on the first user account data, if the first user is authorized to access the requested web-page.

8. (Previously Presented) A method as recited by claim 2, wherein said receiving step comprises:

receiving second user account data from the second user; and determining, based on the second user account data, if the second user is authorized to access the requested web-page.

- 9. (Previously Presented) A method as recited by claim 2, wherein each of the first user and the second user have a computing device having a display on which the web-page is displayed, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display, and wherein the script code embedded within each user's web-page adds interactive functionality to the web page by displaying one or more movements of the first user's cursor on the web-page of the second user.
- 10. (Previously Presented) A method as recited by claim 2, wherein each of the first user and the second user have a computing device having a display on which the web-page is displayed, and wherein the script code embedded within the web-page of the first user and the second user adds interactive functionality to the web-page by:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

determining the identifier of the particular element that is the subject of actions by the first user;

transmitting the identifier to the second user's computing device; and

Amendment and Response dated June 11, 2007

locating the corresponding element on the second user's web page by using the identifier, so that the actions of the first user can be communicated to the second user.

11. (Currently Amended) A method of facilitating interaction between a first user viewing a web-page and a second user viewing the web-page, said method comprising:

receiving a web-page request and providing the web-page to each of the first and second user, the web-page having embedded script code to provide interactive functionality to the web-page;

receiving cursor coordinate data from one of the first or second user; and transmitting the received cursor coordinate data to the other one of the first or second user;

wherein the script code is embedded <u>prior to providing the web-page in response</u>

<u>to the web-page request absent user editing</u> by parsing the requested webpage to determine an appropriate location to embed script code that is
absent from the requested web page prior to said parsing.

- 12. (Previously Presented) A method as recited by claim 11, wherein the cursor coordinate data is point data or draw data.
- 13. (Previously Presented) A method as recited by claim 11, further comprising transmitting to one of the first or the second user, an identity for the other one of the first or the second user.
- 14. (Original) A method as recited by claim 11, wherein the first and second users are participants in a session, said method further comprising:

determining if a new user has joined the session; and transmitting to each user participating in the session, an identity for the new user.

15. (Original) A method as recited by claim 11, wherein the first and second users are participants in a session, said method further comprising:

Appl. No.: 09/916,543 Docket No.: 085804 . 013500 Amendment and Response dated June 11, 2007

determining if a user has left the session; and transmitting to each user participating in the session, an identity for the user that has left the session.

16. (Currently Amended) A system for adding interactive functionality to a web-page requested by a first user having a computing device connectable to the Internet using an Internet browser on the first user's computing device, the Internet browser enabling the first user to cause the computing device to establish a connection to the Internet and to request and receive web-pages, said system comprising:

a server, the first user's computing device being connectable to said server using the Internet browser, said server being operable in connection with software loaded on the server for receiving a request from the first user for the web-page, said server further being operable in connection with the software for retrieving the requested web-page and embedding, absent user editing, script code within the requested web-page to add interactive functionality to the web-page, said server further being operable in connection with the software for providing transmitting the requested web-page having the embedded script code to the first user's computing device;

wherein said server is further operable in connection with the software for embedding script code <u>prior to providing the web-page in response to the web-page request by parsing to parse</u> the requested web-page to determine an appropriate location to embed script code that is absent from the requested web page prior to said parsing.

17. (Currently Amended) A system as recited by claim 16, wherein said server is further operable in connection with the software on said server for receiving a request for the web-page from a second user having a computing device connectable to the Internet using an Internet browser on the second user's computing device, the Internet browser enabling the second user to cause the computing device to establish a connection to the Internet and to request and receive web-pages, said server being further operable in connection with the software on said

Appl. No.: 09/916,543

Amendment and Response dated June 11, 2007

server for <u>providing transmitting</u> the requested web-page having the embedded script code to the second user's computing device, the script code enabling the first user and the second user to interact with each other while viewing the web-page.

Docket No.: 085804.013500

- 18. (Cancelled)
- 19. (Cancelled)
- 20. (Previously Presented) A system as recited by claim 16, wherein said server is further operable in connection with the software for receiving first user account data from the first user, and wherein said server is further operable in connection with the software for determining if the first user is authorized to access the requested web-page.
- 21. (Previously Presented) A system as recited by claim 17, wherein said server is further operable in connection with the software for receiving second user account data from the second user and wherein said server is further operable in connection with the software for determining if the second user is authorized to access the requested web-page.
- 22. (Previously Presented) A system as recited by claim 17, wherein each of the first user's computing device and the second user's computing device has a cursor control device to control movement of a cursor on a display of each of the first user's computing device and the second user's computing device, and wherein said server is further operable in connection with the software for adding interactive functionality to the web page by embedding script code within the web-page to display one or more movements of the first user's cursor on the web-page of the second user.
- 23. (Previously Presented) A system as recited by claim 17, wherein said server and said script code are further operable in connection with the software for adding interactive functionality to the web-page by:

Amendment and Response dated June 11, 2007

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

determining the identifier of the particular element that is the subject of actions by the first user;

transmitting the identifier to the second user's computing device: and locating the corresponding element on the second user's web page by using the identifier, so that the actions of the first user can be communicated to the second user.

- 24. (Currently Amended) A system for facilitating interaction between a first user viewing a web-page and a second user viewing the web-page, said system comprising:
  - web-page request and providing the web-page to each of the first user and the second user, the web-page having embedded, absent user editing, script code to provide interactive functionality to the web-page, said server and said script code being further operable in connection with the software for receiving cursor coordinate data from one of the first or second user, said server and said script code being further operable in connection with the software for transmitting the received cursor coordinate data to the other one of the first or second user; wherein said server is further operable in connection with software for embedding said script code prior to providing the web-page in response to the web-page request by parsing to parse the requested web-page to determine an appropriate location to embed script code that is absent from the requested web page prior to said parsing.
- 25. (Previously Presented) The system as recited by claim 24, wherein the cursor coordinate data is point data or draw data.

Amendment and Response dated June 11, 2007

26. (Previously Presented) The system as recited by claim 24, wherein said server is further operable in connection with software for transmitting to one of the first user or the second user, an identity for the other one of the first user or the second user.

- 27. (Previously Presented) A system as recited by claim 24, wherein the first and second users are participants in a session, said server being further operable in connection with software for determining if a new user has joined the session, and transmitting to each user participating in the session, an identity for the new user.
- 28. (Previously Presented) A system as recited by claim 24, wherein the first and second users are participants in a session, said server being further operable in connection with software for determining if a user has left the session, and transmitting to each user participating in the session, an identity for the user that has left the session.
- 29. (Currently Amended) A computer readable medium comprising computer code for instructing one or more processors to add interactive functionality to a web-page by:

receiving a request for the web-page from a first user;

retrieving the requested web-page;

embedding script code within the requested web-page to add interactive functionality to the web-page; and

<u>providing</u> transmitting the requested web-page having the embedded script code to the first user;

wherein said embedding step, which is performed absent user editing prior to

providing the web-page in response to the web-page request, comprises

parsing the requested web-page to determine an appropriate location to

embed the script code that is absent from the requested web page prior to

said parsing.

30. (Currently Amended) A computer readable medium as recited by claim 29, further comprising computer code for instructing one or more processors to add interactive functionality to a web-page by:

8

Amendment and Response dated June 11, 2007

receiving a request for the requested web-page from a second user; and providing transmitting the requested web-page having the embedded script code to the second user, the script code enabling the first user and the second user to interact with each other while viewing the requested web-page.

31. (Currently Amended) A computer readable medium comprising computer code for instructing one or more processors to facilitate interaction between a first user viewing a web-page and a second user viewing the same web-page by:

receiving a web-page request and providing the web-page to each of the first user and the second user, the web-page having embedded script code to provide interactive functionality to the web-page;

receiving cursor coordinate data from one of the first user or the second user; and transmitting the received cursor coordinate data to the other one of the first or the second user;

wherein the script code is embedded <u>prior to providing the web-page in response</u>

<u>to the web-page request absent user editing</u> by parsing web-page to

determine an appropriate location to embed the script code that is absent

from the requested web page prior to said parsing.

- 32. (Previously Presented) A method as recited by claim 1, wherein the embedding step further comprises storing the script code on a computing device of the first user prior to embedding the script code within the requested web-page.
- 33. (Previously Presented) A method as recited by claim 32, wherein the storing step further comprises downloading the script code for storage on the computing device.
- 34. (Previously Presented) A method as recited by claim 2, wherein the embedding step further comprises storing the script code on a computing device of at least one of the first user and the second user prior to embedding the script code within the requested web-page.

Appl. No.: 09/916,543

Docket No.: 085804.013500 Amendment and Response dated June 11, 2007

35. (Previously Presented) A method as recited by claim 34, wherein the storing step further comprises downloading the script code for storage on the computing device.

36. (Previously Presented) A method as recited by claim 9, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by: determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page; and transmitting the cursor coordinate data over which the first user's cursor is positioned to the second user so that the second user can perceive the first

37. (Previously Presented) A method as recited by claim 36, wherein the cursor coordinate data is point data or draw data.

user's cursor position on the displayed web page.

- 38. (Previously Presented) A method as recited by claim 37, wherein said draw data permits the second user to perceive drawing on the web-page performed by the first user.
- 39. (Previously Presented) A method as recited by claim 37, wherein the script code further enables the first user to switch between point mode and draw mode.
- 40. (Previously Presented) A method as recited by claim 9, wherein the second user's computing device has a cursor control device to control movement of a cursor on the second user's display, and wherein the script code embedded within the web-page of the first user and the second user further adds interactive functionality to the web page by displaying one or more movements of the second user's cursor on the web-page of the first user.
- (Previously Presented) A method as recited by claim 40, wherein the one or more 41. movements of each user's cursor are displayed on the web page of the other user by: determining each user's cursor position by obtaining cursor coordinate data as each user causes the cursor to move over the displayed web-page; and

Appl. No.: 09/916,543 Docket No.: 085804 . 013500 Amendment and Response dated June 11, 2007

transmitting the cursor coordinate data over which each user's cursor is positioned to the other user so that the other user can perceive each user's cursor position on the displayed web page.

- 42. (Previously Presented) A method as recited by claim 41, wherein the cursor coordinate data is point data or draw data.
- 43. (Previously Presented) A method as recited by claim 42, wherein said draw data permits the first and second user to perceive drawing on the web-page performed by the other user.
- 44. (Previously Presented) A method as recited by claim 42, wherein the script code further enables the first and second user to switch between point mode and draw mode.
- 45. (Previously Presented) A method as recited by claim 10, further comprising storing information regarding the relationship between the elements and the identifiers on the computing device of the first user and the second user.
- 46. (Previously Presented) A method as recited by claim 10, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page, and the one or more HTML tags is assigned a unique identifier.
- 47. (Previously Presented) A method as recited by claim 10, wherein at least one element on the web-page is characterized by a bounding shape defined by the script code, and wherein the shape provides a reference point from which various parts of the element may be located on the web-page.
- 48. (Previously Presented) A method as recited by claim 10, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, the comparing step further

comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

- 49. (Previously Presented) A method as recited by claim 10, wherein the script code embedded within each user's web-page further adds interactive functionality to the web-page by: determining the identifier of the particular element that is the subject of actions by the second user;
  - transmitting the identifier from the second user's computing device to the first user's computing device; and
  - locating the element corresponding to the identifier received from the second user's computing device on the first user's web page, so that actions of the second user can be communicated to the first user.
- 50. (Previously Presented) A method as recited by claim 9, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:
  - analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

storing each identifier;

- determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page;
- comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the first user's cursor is positioned;
- transmitting the cursor coordinate data and identifier for the element over which the first user's cursor is positioned to the second user's computing device; and
- locating the corresponding element on the second user's web page by using the identifier, so that the second user can perceive the first user's cursor position on the displayed web-page.

Appl. No.: 09/916,543

Amendment and Response dated June 11, 2007

53.

51. (Previously Presented) A method as recited by claim 50, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

Docket No.: 085804.013500

- 52. (Previously Presented) A method as recited by claim 51, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.
- movements of the second user's cursor are displayed on the first user's web page by: determining the second user's cursor position by obtaining cursor coordinate data as the second user causes the cursor to move over the displayed web-page; comparing the cursor coordinate data with the stored one or more identifiers to
  - determine the element over which the second user's cursor is positioned; transmitting the cursor coordinate data and identifier for the element over which the second user's cursor is positioned to the first user's computing device; and

(Previously Presented) A method as recited by claim 50, wherein one or more

- locating the element corresponding to the identifier received from the second user's computing device on the first user's web-page, so that the first user can perceive the
- second user's cursor position on the displayed web-page.
- 54. (Previously Presented) A method of claim 11, further comprising displaying one or more movements of one of the first user's cursor or the second user's cursor on the web-page of the other user.
- (Previously Presented) A method as recited by claim 54, wherein the received 55. cursor coordinate data is one of the first user's cursor position or the second user's cursor position

Docket No.: 085804 . 013500

as the one of the first user or the second user causes the cursor to move over the displayed webpage.

- 56. (Previously Presented) A method of claim 12, wherein said draw data permits one of the first user or the second user to perceive drawing performed by the other one of the first user or the second user.
  - 57. (Previously Presented) A method of claim 11, further comprising: analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;
    - determining the one of the first user's cursor position or the second user's cursor position from the received cursor coordinate data as the one of the first user or the second user causes the cursor to move over the displayed webpage;
    - comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the one of the first user's cursor or the second user's cursor is positioned; and
    - locating the corresponding element on the other one of the first user's web page or the second user's web page by using the identifier, so that the other one of the first user or the second user can perceive the cursor position on the displayed web-page.
- 58. (Previously Presented) A method as recited by claim 57, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

Appl. No.: 09/916,543
Amendment and Response dated June 11, 2007

59. (Previously Presented) A method as recited by claim 57, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.

Docket No.: 085804.013500

- 60. (Previously Presented) A method as recited by claim 11, further comprising storing the script code on a computing device of at least one of the first user or the second user prior to embedding the script code within the requested web-page.
- 61. (Previously Presented) A method as recited by claim 60, wherein the storing step further comprises downloading the script code for storage on the computing device.
- 62. (Previously Presented) A system as recited by claim 22, wherein said server and said script code are further operable in connection with the software to:
  - analyze the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

store each identifier;

- determine the first user's cursor position by obtaining cursor coordinate data as
  the first user causes the cursor to move over the displayed web-page;
  compare the cursor coordinate data with the stored one or more identifiers to
  determine the element over which the first user's cursor is positioned;
  transmit the cursor coordinate data and identifier for the element over which the
  first user's cursor is positioned to the second user's computing device; and
  locate the corresponding element on the second user's web page by using the
  identifier, so that the second user can perceive the first user's cursor
  position on the displayed web-page.
- 63. (Previously Presented) A system as recited by claim 62, wherein said server and said script code are further operable in connection with the software to construct a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and store the tree in a data file on the computing device of the first user and the

second user, and compare the cursor coordinate data with the stored tree, and parse the tree to locate the element corresponding to the identifier.

Docket No.: 085804.013500

- 64. (Previously Presented) A system as recited by claim 63, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.
- 65. (Previously Presented) A system as recited by claim 62, wherein said server and said script code are further operable in connection with the software to:
  - determine the second user's cursor position by obtaining cursor coordinate data as
    the second user causes the cursor to move over the displayed web-page;
    compare the cursor coordinate data with the stored one or more identifiers to
    determine the element over which the second user's cursor is positioned;
    transmit the cursor coordinate data and identifier for the element over which the
    second user's cursor is positioned to the first user's computing device; and
    locate the element corresponding to the identifier received from the second user's
    computing device on the first user's web-page, so that the first user can
    perceive the second user's cursor position on the displayed web-page.
- 66. (Previously Presented) A system as recited by claim 22, wherein said server and said script code are further operable in connection with the software to display the one or more movements of the first user's cursor on the second user's web page by:
  - determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page; and transmitting the cursor coordinate data over which the first user's cursor is positioned to the second user so that the second user can perceive the first user's cursor position on the displayed web page.
- 67. (Previously Presented) A system as recited by claim 66, wherein the cursor coordinate data is point data or draw data.

Amendment and Response dated June 11, 2007

68. (Previously Presented) A system as recited by claim 67, wherein said draw data permits the second user to perceive drawing on the web-page performed by the first user.

69. (Previously Presented) A system as recited by claim 22, wherein said server is further operable in connection with the software for adding interactive functionality to the web page by embedding script code within the web-page to display one or more movements of the second user's cursor on the web-page of the first user.

70. (Previously Presented) A system as recited by claim 69, wherein said server and said script code are further operable in connection with the software to display the one or more movements of each user's cursor on the web page of the other user by:

> determining each user's cursor position by obtaining cursor coordinate data as each user causes the cursor to move over the displayed web-page; and transmitting the cursor coordinate data over which each user's cursor is positioned to the other user so that each user can perceive the other user's cursor position on the displayed web page.

- 71. (Previously Presented) A system as recited by claim 70, wherein the cursor coordinate data is point data or draw data.
- 72. (Previously Presented) A system as recited by claim 71, wherein said draw data permits the first and second user to perceive drawing on the web-page performed by the other user.
- 73. (Previously Presented) A system as recited by claim 22, wherein said server is further operable in connection with the software to store the script code on a computing device of one of the first user or the second user prior to embedding the script code within the requested web-page.
- 74. (Previously Presented) A system as recited by claim 73, wherein the script code is downloaded for storage on the computing device.

Appl. No.: 09/916,543 Docket No.: 085804.013500 Amendment and Response dated June 11, 2007

75. (Currently Amended) A method of adding interactive functionality to a web-page comprising:

receiving a request for the web-page from a first user; retrieving the requested web page;

inserting, within the requested web-page, a reference to script code to add interactive functionality to the requested web-page; and

<u>providing</u> transmitting the requested web-page having the inserted reference to the first user;

wherein said inserting step, which is performed absent user editing prior to

providing the web-page in response to the web-page request, and

comprises parsing the requested web-page to determine an appropriate

location to insert the reference that is absent from the requested web page

prior to said parsing.

- 76. (Currently Amended) A method as recited by claim 75, further comprising: receiving a request for the requested web-page from a second user; and providing transmitting the requested web-page having the inserted reference to the second user, the script code enabling the first user and the second user to interact with each other while viewing the requested web-page.
- 77. (Previously Presented) A method as recited by claim 75, further comprising using the reference to embed the script code within the requested web page.
  - 78. (Cancelled)
- 79. (Previously Presented) A method as recited by claim 75, wherein the web-page includes a header and wherein the appropriate location is in the header.
- 80. (Previously Presented) A method as recited by claim 76, further comprising using the reference to embed the script code within the requested web page.

Amendment and Response dated June 11, 2007

81. (Cancelled)

82. (Previously Presented) A method as recited by claim 80, wherein the web-page includes a header and wherein the appropriate location is in the header.

83. (Previously Presented) A method as recited by claim 75, wherein said receiving step comprises:

> receiving first user account data from the first user; and determining, based on the first user account data, if the first user is authorized to access the requested web-page.

84. (Previously Presented) A method as recited by claim 76, wherein said receiving step comprises:

> receiving second user account data from the second user; and determining, based on the second user account data, if the second user is authorized to access the requested web-page.

- 85. (Previously Presented) A method as recited by claim 80, further comprising storing the script code on at least one of the first user's computing device and the second user's computing device prior to using the reference to embed the script code within the requested webpage.
- 86. (Previously Presented) A method as recited by claim 85, wherein the storing step further comprises downloading the script code for storage on the computing device.
- 87. (Previously Presented) A method as recited by claim 80, wherein each of the first user and the second user have a computing device having a display on which the web-page is displayed, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display and wherein the script code embedded within each user's

19

web-page adds interactive functionality to the web page by displaying one or more movements of the first user's cursor on the web-page of the second user.

Docket No.: 085804.013500

- 88. (Previously Presented) A method as recited by claim 87, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:

  determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page; and transmitting the cursor coordinate data over which the first user's cursor is positioned to the second user so that the second user can perceive the first user's cursor position on the displayed web page.
- 89. (Previously Presented) A method as recited by claim 88, wherein the cursor coordinate data is point data or draw data.
- 90. (Previously Presented) A method as recited by claim 89, wherein said draw data permits the second user to perceive drawing on the web-page performed by the first user.
- 91. (Previously Presented) A method as recited by claim 89, wherein the script code further enables the first user to switch between point mode and draw mode.
- 92. (Previously Presented) A method as recited by claim 87, wherein the second user's computing device has a cursor control device to control movement of a cursor on the second user's display, and wherein the script code embedded within the web-page of the first user and the second user further adds interactive functionality to the web page by displaying one or more movements of the second user's cursor on the web-page of the first user.
- 93. (Previously Presented) A method as recited by claim 92, wherein the one or more movements of each user's cursor are displayed on the web page of the other user by:

  determining each user's cursor position by obtaining cursor coordinate data as each user causes the cursor to move over the displayed web-page; and

Appl. No.: 09/916,543 Docket No.: 085804 . 013500 Amendment and Response dated June 11, 2007

transmitting the cursor coordinate data over which each user's cursor is positioned to the other user so that each user can perceive the other user's cursor position on the displayed web page.

- 94. (Previously Presented) A method as recited by claim 93, wherein the cursor coordinate data is point data or draw data.
- 95. (Previously Presented) A method as recited by claim 94, wherein said draw data permits the first and second user to perceive drawing on the web-page performed by the other user.
- 96. (Previously Presented) A method as recited by claim 94, wherein the script code further enables the first and second user to switch between point mode and draw mode.
- 97. (Previously Presented) A method as recited by claim 80, wherein each of the first user and the second user have a computing device having a display on which the web-page is displayed, and wherein the script code embedded within web-page of the first user and the second user adds interactive functionality to the web-page by:
  - analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;
  - determining the identifier of the particular element that is the subject of actions by the first user;
  - transmitting the identifier to the second user's computing device; and locating the corresponding element on the second user's web page by using the identifier, so that the actions of the first user can be communicated to the second user.
- 98. (Previously Presented) A method as recited by claim 97, further comprising storing information regarding the relationship between the elements and the identifiers on the computing device of the first user and the second user.

Amendment and Response dated June 11, 2007

99. (Previously Presented) A method as recited by claim 97, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page, and the one or more HTML tags is assigned a unique identifier.

- 100. (Previously Presented) A method as recited by claim 97, wherein at least one element on the web-page is characterized by a bounding shape defined by the script code, and wherein the shape provides a reference point from which various parts of the element may be located on the web-page.
- 101. (Previously Presented) A method as recited by claim 97, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.
- 102. (Previously Presented) A method as recited by claim 97, wherein the script code embedded within each user's web-page further adds interactive functionality to the web-page by: determining the identifier of the particular element that is the subject of actions by the second user;
  - transmitting the identifier from the second user's computing device to the first user's computing device; and
  - locating the element corresponding to the identifier received from the second user's computing device on the first user's web page, so that actions of the second user can be communicated to the first user.
- 103. (Previously Presented) A method as recited by claim 87, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:

Appl. No.: 09/916,543 Docket No.: 085804.013500 Amendment and Response dated June 11, 2007

> analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

storing each identifier;

- determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page;
- comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the first user's cursor is positioned;
- transmitting the cursor coordinate data and identifier for the element over which the first user's cursor is positioned to the second user's computing device; and
- locating the corresponding element on the second user's web page by using the identifier, so that the second user can perceive the first user's cursor position on the displayed web-page.
- 104. (Previously Presented) A method as recited by claim 103, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.
- 105. (Previously Presented) A method as recited by claim 104, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.
- 106. (Previously Presented) A method as recited by claim 103, wherein the one or more movements of each user's cursor are displayed on the other user's web page by:
  - determining the second user's cursor position by obtaining cursor coordinate data as the second user causes the cursor to move over the displayed web-page;

Appl. No.: 09/916,543 Amendment and Response dated June 11, 2007

Docket No.: 085804.013500

comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the second user's cursor is positioned; transmitting the cursor coordinate data and identifier for the element over which the second user's cursor is positioned to the first user's computing device; and

locating the element corresponding to the identifier received from the second user's computing device on the first user's web-page, so that the first user can perceive the second user's cursor position on the displayed web-page.

107. (Currently Amended) A system for adding interactive functionality to a web-page requested by a first user having a computing device connectable to the Internet using an Internet browser on first user's computing device, the Internet browser enabling the first user to cause the computing device to establish a connection to the Internet and to request and receive web-pages, said system comprising:

> a server, the first user computing device being connectable to said server using the Internet browser, said server being operable in connection with software loaded on the server for receiving a request from the first user for the webpage, said server further being operable in connection with the software for retrieving the requested web-page and inserting, within the requested web-page and absent user editing, a reference to script code to add interactive functionality to the web-page, said server further being operable in connection with the software for providing transmitting the requested web-page having the inserted reference to the first user's computing device; wherein said server is further operable in connection with the software for inserting the reference prior to providing the web-page in response to the web-page request by parsing to parse the requested web-page to determine an appropriate location to insert the reference that is absent from the requested web page prior to said parsing.

108. (Currently Amended) A computer readable medium comprising computer code for instructing one or more processors to add interactive functionality to a web-page by:

user;

receiving a request for the web-page from a user; retrieving the requested web-page;

inserting, within the requested web-page, a reference to script code to add interactive functionality to the requested web-page; and <a href="mailto:providing">providing transmitting</a> the requested web-page having the inserted reference to the

wherein said inserting step, which is performed absent user editing prior to

providing the web-page in response to the web-page request, comprises
parsing the requested web-page to determine an appropriate location to
insert the reference that is absent from the requested web page prior to
said parsing.

## 109. (Cancelled)

- 110. (Previously Presented) The computer readable medium as recited by claim 108, further comprising storing the script code on a computing device of the user prior to using the reference to embed the script code within the requested web-page.
- 111. (Currently Amended) A computer readable medium comprising computer code for instructing one or more processors to facilitate interaction between a first user viewing a web-page and a second user viewing the same web-page by:

receiving a request for the web-page and providing the web-page to each of the first user and the second user, the web-page having a reference to script code inserted therein to provide interactive functionality to the web-page; using the reference to embed the script code within the web-page;

receiving cursor coordinate data from one of the first or second user; and transmitting the received cursor coordinate data to the other one of the first or second user;

wherein the reference is inserted <u>prior to providing the web-page in response to</u>
the web-page <u>request absent user editing</u> by parsing the requested web-

Amendment and Response dated June 11, 2007

page to determine an appropriate location to insert the reference that is absent from the requested web page prior to said parsing.

112. (Currently Amended) A system for facilitating interaction between a first user viewing a web-page and a second user viewing the web-page, said system comprising:

a server operable in connection with software loaded on the server for receiving a web-page request and providing the web-page to each of the first user and the second user, the web-page having a reference to script code inserted therein to provide interactive functionality to the web-page, said server being further operable in connection with the software for using the reference to embed the script code within web-page; said server and said script code being further operable in connection with the software for receiving cursor coordinate data from one of the first or second user, said server and said script code being further operable in connection with the software for transmitting the received cursor coordinate data to the other one of the first or second user; wherein said server is further operable in connection with the software for inserting the reference prior to providing the web-page in response to the web-page request absent user editing by parsing the requested web-page to determine an appropriate location to insert the reference that is absent from the requested web page prior to said parsing.

113. (Previously Presented) A method as recited by claim 47, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display, and wherein the script code further adds interactive functionality to display the position of the first user's cursor within a particular element on the web-page of the second user by:

determining a particular portion of an element to which the first user's cursor is

pointing by obtaining cursor coordinate data corresponding to the position

of the first user's cursor within the particular element by obtaining the first

user's cursor position relative to a reference point associated with the bounding shape on the first user's web page;

transmitting the identifier for the particular element along with the relative cursor coordinate data to the second user's computing device; and

locating the position of the first user's cursor relative to the corresponding element on the second user's web page by using the identifier to determine the corresponding element and applying the relative cursor coordinate data to a corresponding reference point associated with a bounding shape associated with the corresponding element on the second user's web page, so that the position of the first user's cursor can be perceived by the second user.

114. (Previously Presented) A method as recited by claim 100, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display, and wherein the script code further adds interactive functionality to display the position of the first user's cursor within a particular element on the web-page of the second user by:

determining a particular portion of an element to which the first user's cursor is pointing by obtaining cursor coordinate data corresponding to the position of the first user's cursor within the particular element by obtaining the first user's cursor position relative to a reference point associated with the bounding shape on the first user's web page;

transmitting the identifier for the particular element along with the relative cursor coordinate data to the second user's computing device; and

locating the position of the first user's cursor relative to the corresponding element on the second user's web page by using the identifier to determine the corresponding element and applying the relative cursor coordinate data to a corresponding reference point associated with a bounding shape associated with the corresponding element on the second user's web page, so that the position of the first user's cursor can be perceived by the second user.

Amendment and Response dated June 11, 2007

115. (Previously Presented) A method as recited by claim 2, wherein the same script code is embedded within the web-page requested by the first user and the second user.

- 116. (Previously Presented) A method as recited by claim 2, wherein the script code embedded within the web-page requested by the first user differs from the script code embedded within the web-page requested by the second user.
- 117. (Previously Presented) A method as recited by claim 11, wherein the same script code is embedded within the web-page provided to the first user and the second user.
- 118. (Previously Presented) A method as recited by claim 11, wherein the script code embedded within the web-page provided to the first user differs from the script code embedded within the web-page provided to the second user.
- 119. (Previously Presented) A system as recited by claim 17, wherein the same script code is embedded within the web-page requested by the first user and the second user.
- 120. (Previously Presented) A system as recited by claim 17, wherein the script code embedded within the web-page requested by the first user differs from the script code embedded within the web-page requested by the second user.
- 121. (Previously Presented) A method as recited by claim 76, wherein the same reference is inserted within the web-page requested by the first user and the second user.
- 122. (Previously Presented) A method as recited by claim 76, wherein the reference inserted within the web-page requested by the first user differs from the reference inserted within the web-page requested by the second user.
- 123. (Previously Presented) A method as recited by claim 80, wherein the same script code is embedded within the web-page requested by the first user and the second user.

Appl. No.: 09/916,543
Amendment and Response dated June 11, 2007

Amendment and Response dated June 11, 2007

124. (Previously Presented) A method as recited by claim 80, wherein the script code embedded within the web-page requested by the first user differs from the script code embedded within the web-page requested by the second user.

Docket No.: 085804.013500